

WHAT IS CLAIMED IS:

1 1. A method of treating an inflammatory disorder in a mammal, said method
2 comprising administering to said mammal a therapeutically effective amount of an antagonist of
3 a native sequence STIgMA polypeptide.

1 2. The method of Claim 1 wherein said native sequence STIgMA polypeptide is
2 selected from the group consisting of polypeptides of SEQ ID NOS: 2, 32, 33, and 34.

1 3. The method of Claim 2, wherein said antagonist is an antibody.

1 4. The method of Claim 3, wherein the antibody is a monoclonal antibody.

1 5. The method of Claim 4, wherein the antibody has non-human complementarity
2 determining region (CDR) residues and contains human framework region (FR) residues.

1 6. The method of Claim 5, wherein the antibody is a composition in admixture with
2 a pharmaceutically acceptable carrier or excipient.

1 7. The method of Claim 4 wherein said antagonist is an immunoadhesin.

1 8. The method of Claim 7 wherein said immunoadhesin comprises a STIgMA
2 extracellular domain sequence fused to an immunoglobulin constant region sequence.

1 9. The method of Claim 8 wherein said extracellular domain sequence is essentially
2 free of transmembrane domain sequences.

1 10. The method of Claim 9 wherein said immunoglobulin is an IgG.

1 11. The method of Claim 10 wherein said IgG is IgG1 or IgG3.

1 12. The method of Claim 2 wherein the inflammatory disorder is selected from the
2 group consisting of: inflammatory bowel disease; systemic lupus erythematosus; rheumatoid
3 arthritis; juvenile chronic arthritis; spondyloarthropathies; systemic sclerosis, for example,
4 scleroderma; idiopathic inflammatory myopathies for example, dermatomyositis, polymyositis;

5 Sjögren's syndrome; systemic vaculitis; sarcoidosis; autoimmune hemolytic anemia for example,
6 immune pancytopenia, paroxysmal nocturnal hemoglobinuria; autoimmune thrombocytopenia,
7 for example, idiopathic thrombocytopenic purpura, immune-mediated thrombocytopenia;
8 thyroiditis, for example, Grave's disease, Hashimoto's thyroiditis, juvenile lymphocytic
9 thyroiditis, atrophic thyroiditis; diabetes mellitus, immune-mediated renal disease, for example,
10 glomerulonephritis, tubulointerstitial nephritis; demyelinating diseases of the central and
11 peripheral nervous systems such as multiple sclerosis, idiopathic polyneuropathy; hepatobiliary
12 diseases such as infectious hepatitis such as hepatitis A, B, C, D, E and other nonhepatotropic
13 viruses; autoimmune chronic active hepatitis; primary biliary cirrhosis; granulomatous hepatitis;
14 and sclerosing cholangitis; inflammatory and fibrotic lung diseases (*e.g.*, cystic fibrosis); gluten-
15 sensitive enteropathy; Whipple's disease; autoimmune or immune-mediated skin diseases
16 including bullous skin diseases, erythema multiforme and contact dermatitis, psoriasis; allergic
17 diseases of the lung such as eosinophilic pneumonia, idiopathic pulmonary fibrosis and
18 hypersensitivity pneumonitis, transplantation associated diseases including graft rejection and
19 graft-versus host disease.

1 13. The method of Claim 12 wherein said inflammatory disorder is rheumatoid
2 arthritis.

1 14. The method of Claim 12 wherein said mammal is human.

1 15. The method of Claim 13 wherein said mammal is human.

1 16. A method of diagnosing an inflammatory disorder in a mammal, said method
2 comprising detecting the level of expression of a gene encoding a STIgMA polypeptide (a) in a
3 test sample of cells obtained from said mammal, and (b) in a control sample of known normal
4 cells of the same cell type, wherein a higher level of expression of said gene in the test sample as
5 compared to the control sample is indicative of the presence of an immune related disorder in
6 the mammal from which the test tissue cells were obtained.

1 17. The method of Claim 16 wherein said STIgMA polypeptide is selected from the
2 group consisting of polypeptides of SEQ ID NO: 2, 32, 33, and 34.

1 18. A method of diagnosing an inflammatory disorder in a mammal, said method
2 comprising (a) contacting an anti-STIgMA antibody with a test sample of cells obtained from

3 said mammal, and (b) detecting the formation of a complex between the antibody and STIgMA
4 polypeptide in the test sample, wherein formation of said complex is indicative of the presence
5 of an inflammatory disorder in said mammal.

1 19. An isolated antibody which specifically binds a STIgMA polypeptide.

1 20. The antibody of Claim 19 wherein said STIgMA polypeptide is selected from the
2 group consisting of polypeptides of SEQ ID NOS: 2, 32, 33, and 34.

1 21. The antibody of Claim 20 which is a monoclonal antibody.

1 22. The antibody of Claim 21 which contains non-human complementarity
2 determining region (CDR) residues and human framework region (FR) residues.

1 23. The antibody of Claim 22 which is labeled.

1 24. The antibody of Claim 23 which is immobilized on a solid support.

1 25. The antibody of Claim 20 which is an antibody fragment, a single-chain antibody,
2 or an anti-idiotypic antibody.

1 26. A composition comprising the antibody of Claim 22 in admixture with a
2 pharmaceutically-acceptable carrier.

1 27. An isolated nucleic acid molecule comprising a nucleotide sequence encoding a
2 polypeptide having at least about 80% sequence identity with the amino acid sequence of amino
3 acids 21 to 276 of SEQ ID NO: 32, or amino acids 21 to 182 of SEQ ID NO: 33, or amino acids
4 21 to 180 of SEQ ID NO: 34.

1 28. The isolated nucleic acid molecule of Claim 27 wherein said sequence identity is
2 at least about 85%.

1 29. The isolated nucleic acid molecule of Claim 28 wherein said sequence identity is
2 at least about 90%.

1 30. The isolated nucleic acid molecule of Claim 29 wherein said sequence identity is
2 at least about 95%.

1 31. The isolated nucleic acid molecule of Claim 30 wherein said sequence identity is
2 at least about 99%.

1 32. A vector comprising the nucleic acid molecule of Claim 27.

1 33. A cell comprising the vector of Claim 32.

1 34. An isolated nucleic acid molecule comprising a nucleotide sequence encoding a
2 polypeptide selected from the group consisting of amino acids 21 to 399 of SEQ ID NO: 32,
3 amino acids 21 to 305 of SEQ ID NO: 33, and amino acids 21 to 280 of SEQ ID NO: 34.

1 35. A vector comprising the nucleic acid molecule of Claim 34.

1 36. A cell comprising the vector of Claim 35.

1 37. A polypeptide comprising an amino acid sequence selected from the group
2 consisting of amino acids 21 to 276 of SEQ ID NO: 32, amino acids 21 to 182 of SEQ ID NO:
3 33, and amino acids 21 to 180 of SEQ ID NO: 34.

1 38. An immunoadhesin comprising amino acids from 1 or about 21 to about 276 of
2 SEQ ID NO: 32, or amino acids from 1 or about 21 to about 182 of SEQ ID NO: 33, or amino
3 acids 1 or about 21 to about 180 of SEQ ID NO: 34, fused to an immunoglobulin constant region
4 sequence.

1 39. The immunoadhesin of Claim 38 wherein said constant region sequence is a
2 sequence of an immunoglobulin heavy chain constant region.